

TOWN OF ACTON

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MEMORANDUM

To: Planning Board Date: April 8, 2016

From: Roland Bartl, AICP, Planning Director

Subject: Special Permit Application

Ground Mounted Industrial Solar Photovoltaic Installation

(Borrego Solar Systems, Inc.)

Applicable Zoning

Bylaw (ZBL) Sections: 3.6.6 & 3.11 **Location:** 127 Stow Street

Map/Parcel: H1-6

Owner: Wallace M. Fletcher (Trustee)
Applicant: Borrego Solar Systems, Inc.

Engineer: David M. Albrecht, P.E., Borrego Solar

Land area: +/- 2 acres in Acton (fenced area), plus power line to Stow Street **Zoning:** Residence 2 (R-2); Groundwater Protection District (GPD) Zone 3;

100-year flood zone (portion under power line)

Filing Date: February 29, 2016
Hearing: April 19, 2016
Decision due date: July 18, 2016

Attached for your review are the plan and application for the proposed Ground Mounted Industrial Solar Photovoltaic Installation, and comments from other Town departments, committees, and agencies. Please review the other departmental comments. They are not necessarily repeated here.

The proposed project is located at the Stow/Acton town line and comprises +/-10 acres of a fenced-in area, PV panels inside. About 2 acres of that is in Acton along with a new gravel road extended from Stow, and the electrical equipment pad. The line for power feed line into the grid is proposed along a wood road in Acton with the grid connection and metering device on Stow Street, Acton. At the Stow Street connection, the old wood road would be improved with a gravel apron, 16' wide and +/-100' long. Comments follow:

- 1. ZBL section 3.11.3.2 requires landscaping and screening as needed to protect nearby sensitive receptors. The nearest sensitive receptors to the project site in Acton are houses at the end of Billings Street more than 800 feet away and separated by woodland. The PV panels' tilt angle will be 25° south into Stow. The existing wooded buffer provides ample screening.
- 2. ZBL section 3.11.3.4 requires that utility connection lines etc. must be placed underground except where Building Code or adverse ground conditions require otherwise, or at the connection point to existing overhead utility lines. The applicant proposes above ground electrical equipment and an overhead line, 1700-1800 feet long, to Stow Street. The line would run over stretches of wetland and flood plain. Under ZBL section 3.11.5 the Planning Board may approve solar photovoltaic installations that do not meet the basic section 3.11.3 standards, including that of 3.11.3.4, provided that:
 - a. The benefit of installing solar photovoltaic power at the installation site as proposed by the application substantially outweighs the public health, safety, and welfare concerns that Section 3.11.3 requirements are intended to protect (3.11.5.1); or
 - b. The particular design, mitigation measures, offsets, agreements, or other provisions for the proposed installation address such concerns in an alternative and satisfactory manner (3.11.5.2); and
 - c. It meets the standard required special permit findings under ZBL section 10.3.

Utility poles for the power line, if approved above ground, cannot be taller than 36 feet (not likely proposed to be taller).

- 3. ZBL section 3.11.3.7 limits the acreage of forest clearing for solar installations to 1 acre. Much of the Acton site is not forested, so it does not appear that this threshold is breached. A plan note indicates "0.79 acres Acton tree clearing".
- 4. Under special permit, the Board can require the construction of sidewalk along the property frontage. Give the location, the Board should raise the sidewalk contribution question with the applicant.

A draft decision is attached. It provides a couple of choices to be decided if the Board is inclined to grant the requested special permit.

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